



## Motivational justifications of the study routine of medical students: pre and post pandemic by COVID-19

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### Introduction

When entering medical school, the student goes through a process of adaptation and increased responsibilities, which leads to intense changes in the individual's lifestyle. Furthermore, it is necessary to give up leisure and social activities, which can lead to mental suffering. Thus, it is essential for medical students to know how to manage the demands of graduation, so as not to impair their quality of life and health [1]. Therefore, due to the uncertainty that the Covid-19 pandemic caused regarding medical training and the job market, medical students reported increased anxiety, as well as physical and psychological stress. Due to the difficulty of the virtual learning process, in which greater autonomy is required from students, they reported that being subjected to adaptations in the student routine caused negative changes in their grades and a decrease in learning [2].

In 2020, a research study was conducted by the same authors of this paper, presented at the 2nd Simpósio de Ensino e Pesquisa em Saúde (SEPS), regarding the medical student's view on remote classes, in which such classes interfered intensely in theoretical learning, showing difficulties in concentration and commitment in the students' study routine. Moreover, the students reported that they believe that the replacement of the practical classes without being simultaneous to the theoretical classes will have a negative impact in relation to their professional future [3]. Moreover, most medical students do not have healthy habits, such as a balanced diet and physical activity - which was even worse during the quarantine, which was necessary during the pandemic [4]. Furthermore, students also considered their mental health to be affected due to decreased social interaction and difficulty following and learning during remote

classes [3].

Therefore, this article aimed to compare the motivational justifications of the study routine of medical students before and after the pandemic by COVID-19 and to analyze whether there were changes in study behavior and routine after the implementation of remote classes.

### Methods

After approval of the project by the Research Ethics Committee, the Informed Consent Form and the questionnaire were disseminated through social networks to medical students at a private university in the state of São Paulo, in which participation was voluntary. The study was conducted in two stages, the first occurred in the year 2018, the second stage will be in the year 2021, in a post-pandemic context of COVID-19. The virtual questionnaire was constructed by the authors themselves, based on the studies of Fiedler PT (2008) [5], Katsurayama M et al. (2009) [6] and Bassols AMS (2014) [7] containing thirty-seven questions. Inclusion criteria were being a medical student at the university, of both genders, older than 18 years of age, and agreeing to participate in the study. Furthermore, the present study is characterized by a descriptive, applied, cross-sectional data survey. Other statistical analyses will not be addressed in this study.

### Ethical Approval

This study was approved by the Research Ethics Committee, according to the Resolution 466/2012 - CNS/MS.

### Results and Discussion

A total of 378 participants freely responded to the

form. Participants who responded in 2018 comprised group 1, with 133 women (63.9%) and 75 men (36.1%). The participants who answered the form in the year 2021 made up group 2, with 140 women (80%) and 35 men (20%). In both groups, the following outcomes were analyzed: amount of study per week of the participants, beyond the curriculum, amount of daily sleep, intensity of motivation related to physical activity practice, and student performance associated with sleepiness. In the first group, 52.4% of the participants studied more than 8 hours. Women 4.6% slept 6-8 hours per night, and among those who practiced physical activity, 14.4% did not feel fully motivated. Those who studied 9-12 hours per week, only 18.8% felt a drop in student performance when sleepy.

The men in group 1 who studied 9-12 hours per week, only 10.7% felt a drop in student performance when they are sleepy and those who practiced physical activity, only 5.2% did not feel fully motivated. In the second group, 51.4% of the participants studied more than 8 hours. As for the women, 62.9% slept 6-8 hours a night, those who practiced physical activities, 15.7% did not feel fully motivated, 28.5% of the women who studied 9-12 hours reported a drop in performance in studies when drowsy. As for the males in group 2, 6.0% of those who studied from 9-12 hours reported a drop in performance in studies when drowsy, 3.4% did not feel fully motivated and practiced physical activity.

Thus, in the future, the study routine of medical students and their motivational justifications before and after the remote classes during the pandemic will be comparatively analyzed. Since the students in the second group had to undergo the adaptation of the academic routine, along with changes in mental health, including uncertainty about their medical future, as seen in the work presented by the authors in the 2nd SEPS.

## Conclusion

It is believed that the research may corroborate with a better routine of healthy habits, improving the motivation of the students, and consequently a better use of their education. Furthermore, the study may contribute to a better training of medical students, so that they can be oriented in relation to an organizational routine, how to better manage their time regarding the high workload, great demand for studies and quantity of subjects. In addition, they should seek strategies to control stress and anxiety, reducing mental exhaustion.

**Keywords:** COVID-19. Motivation. Medical Education. Academic Routine. Learning Disability.

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Nil.

## Ethical approval

This study was approved by the Research Ethics Committee, according to the Resolution 466/2012 - CNS/MS.

## Informed consent

Not applicable.

## Funding

Not applicable.

## Data sharing statement

No additional data are available.

## Conflict of interest

The authors declare no conflict of interest.

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